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INTRODUCTION.

The general meteorological conditions which prevailed over the United States during November, 1883, as compiled from the reports from the Signal Service and voluntary observers, and from the monthly reports of state weather services, are shown in this REVIEW.

The month has been marked by a succession of severe storms, which resulted in great damage to shipping interests, especially on the lakes.

The paths of nine atmospheric depressions, which are described under "areas of low barometer," are shown on chart i. During the passage of the depression charted as number vi., severe local storms occurred in the Ohio and Mississippi valleys.

On the afternoon of the 5th a tornado visited Springfield, Missouri, causing considerable loss of life and the destruction of much property.

The mean temperature of the month averaged above the normal over the whole country, except in the middle Pacific coast region, where it was lower than the average. Over the middle slope and northern plateau the departures above the normal temperature exceeded 7° .

Large deficiencies in the monthly precipitation occurred in the districts on the Atlantic and Pacific coasts, while in the Gulf states, Ohio valley, upper lake region, and northern Rocky mountain districts, the precipitation exceeded the November average.

A peculiar appearance of the sky after sunset and before sunrise has been generally observed throughout the United States at intervals during the month.

Under the heading "north Atlantic storms" are described thirteen storms which occurred over the north Atlantic ocean during November, the paths of which are approximately shown on chart ii.

In the preparation of this REVIEW the following data, received up to December 20th, have been used, viz.: the regular tri-daily weather-charts, containing data of simultaneous observations taken at one hundred and twenty-two Signal Service stations and sixteen Canadian stations, as telegraphed to this office; one hundred and sixty-two monthly journals, and one hundred and forty-one monthly means from the former, and sixteen monthly means from the latter; two hundred and sixty-three monthly registers from voluntary observers; fifty-two monthly registers from United States Army post surgeons; marine records; international simultaneous observations; marine reports, through the co-operation of the "New York Herald Weather Service;" abstracts of ships' logs, furnished by the publishers of "The New York Maritime Register;" monthly weather reports from the local weather services of Indiana, Iowa, Kansas, Nebraska, Ohio, and Tennessee, and

of the Central Pacific railway company; trustworthy newspaper extracts; and special reports.

ATMOSPHERIC PRESSURE.

[Expressed in inches and hundredths.]

The distribution of mean atmospheric pressure for November, 1883, determined from the tri-daily telegraphic observations of the Signal Service, is shown by the isobarometric lines on chart iii. Two areas of barometric maxima are shown on the chart named. One of these covers a region extending from northwestern Texas to Utah, and is inclosed by the isobar of 30.2, the highest barometric mean, 30.28, being reported from Salt Lake City, Utah; while the other (also inclosed by the isobar of 30.2) extends from the Mississippi river to the Atlantic coast, between the thirty-second and thirty-seventh parallels of latitude. Over a small area, including northern Georgia, western South Carolina, and southeastern Tennessee, the monthly mean pressures have been 30.25. To the northward of the regions of greatest pressure, the barometric means decrease to 29.99 at stations in the extreme northwest and lake region, and to 29.95, at Father Point, Quebec; to the southward they decrease to 30.04 at San Diego, California, and to 30.05 at Key West, Florida.

Compared with the mean pressure of the preceding month (October), there has been a decrease, varying from .01 to .14, in the northern districts from Minnesota eastward to New England. In all other sections of the country the mean pressure has been greater than in the preceding month. The greatest increase is shown in Arizona, Colorado, and Utah, where, at some stations, it exceeded .25. On the middle Pacific coast and over the southern districts from New Mexico to the south Atlantic coast, the increase varied from .10 to .20. In the other districts, where an increase has taken place, it has been less than .10.

DEPARTURES FROM THE NORMAL VALUES FOR THE MONTH.

The mean pressure for November, 1883, has been below the normal for the corresponding month in all parts of the United States, except at a few stations in the south Atlantic and eastern Gulf states where it has been from .01 to 0.3 above. The greatest departures below the normal have occurred from the upper lake region westward to Idaho, where they ranged from .12 to .16. In New England, the lake region, upper Mississippi and Missouri valleys the departures varied from .05 to .08, and in the other districts they were less marked.

BAROMETRIC RANGES.

The barometric ranges for November, 1883, were greatest in New England, the lake region, extreme northwest, upper Mississippi and Missouri valleys. They were least in California, Florida, and in the eastern Gulf states. Over the entire country the extreme ranges were: smallest, .27 at San Diego, California, and .29 at Key West, Florida; largest, 1.59 at Eastport, Maine, and 1.61 on the summit of Mount Washington, New Hampshire.

In the several districts the monthly barometric ranges varied as follows:

New England.—From .92 at New Haven, Connecticut, to 1.61 on the summit of Mount Washington, New Hampshire.